

4.13 ENVIRONMENTAL JUSTICE

4.13.1 Environmental Setting

Area of Effect and Community of Comparison

The project study area used for the Environmental Justice analysis is the "hazard footprint" area, as determined in Section 4.1, Operational Safety/Risk of Upset. From that section, Impact OS-6 concludes that a hazard footprint of 1,500 feet (0.28 miles) was calculated to be the area at risk if a fire or explosion were to occur at the Long Wharf terminal. In addition, the Long Wharf does not transfer any products that would produce gas cloud hazard footprints that would cause health and safety risks to the public. Census tract 378000 is the nearest population block to the 1,500-foot radius; therefore, demographic data from this tract was used as the Study Area for this analysis (see Figure 4.13-1).

According to the U.S. Environmental Protection Agency's (EPA's) "Final Guidance for Incorporation of Environmental Justice Concerns in EPA's National Environmental Policy Act (NEPA) Compliance Analyses" (April 1998), a minority or low income community is disparately affected when the community will bear an uneven level of health and environmental effects compared to the general population. Further, the State CEQA Guidelines recommend that the Community of Comparison selected be the smallest governmental unit that encompasses the impact footprint for each resource. Although the Long Wharf 1,500-foot (0.28 miles) hazard impact footprint does not reach shore, it is closest to the area of influence of census tract 378000, Block Group 12, within the city of Richmond (City). Therefore, the Community of Comparison for this analysis was defined as the City.

Study Area Demographics

As stated above, the study area, or the area of affect from potential hazards occurring at the Long Wharf, is located nearest to census tract 378000, Block Group 12. In the year 2000, Block Group 12 contained a population of 2,895 people, 19 percent of which was of a minority race (see Table 4.13-1). In comparison, the City had a total minority group population ratio of approximately 69 percent.

As an added measure to ensure that study area minority populations are adequately identified, census data was gathered for Hispanic origin. Hispanic is considered an origin, not a race, by the U.S. Census Bureau. An origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States (U.S. Census Bureau 2003). People that identify their origin as Spanish, Hispanic, or Latino may be of any race. Therefore, those who are counted as Hispanic are also counted under one or more race categories, as described above. Approximately 9.2 percent of the study area population was Hispanic in origin (Table 4.13-2). In contrast, the City had a 26.5 percent Hispanic population.

1 Figure 4.13-1 – Census Tract
2

Table 4.13-1
Race Characteristics 2000

Race	Project Study Area	Percent Study Area	City of Richmond	Percent City of Richmond
White	2,334	81.0	31,117	31.4
Black or African American	235	8.0	35,777	36.1
American Indian and Alaska Native	24	1.0	639	0.06
Asian	97	3.0	12,198	12.3
Native Hawaiian and Other Pacific Islander	9	0.31	498	0.05
Some other race alone	81	2.8	13,754	13.9
Two or more races	115	4.0	5,233	5.3
Minority Subtotal	561	19.0	68,099	68.6
Total Population	2,895	100	99,216	100

Source: U.S. Census Bureau 2000.

Table 4.13-2
Hispanic Origin 2000

	Hispanic in Origin	Total Population	Percent Hispanic
Project Study Area	266	2,895	9.2%
City of Richmond	26,319	99,216	26.5%

Source: U.S. Department of Commerce, Census Bureau 2003b

As shown in Table 4.13-3, 65 households within the study area were determined to have an income in 1999 below the poverty level. This represents approximately 3.1 percent of the households within the study area. The City had a higher percentage, with 13.4 percent of its households having incomes below the poverty level.

Table 4.13-3
Household Poverty Status in 1999

	Household Income in 1999 Below Poverty Level	Number of Households	Percent with Household Income in 1999 Below Poverty Level
Project Study Area	65	1,561	4.2%
City of Richmond	3,141	14,323	13.4%

Source: U.S. Department of Commerce, Census Bureau 2003

Census poverty thresholds are the same for all parts of the country and are updated yearly to reflect changes in the Consumer Price Index. However, due the high cost of living in the Bay Area, a higher poverty threshold is needed to accurately characterize the number of low-income households. As part of their 2001 Regional Transportation Plan Equity Analysis and Environmental Justice Report, the Metropolitan Transportation Commission (MTC) used the criterion of 30 percent of households at or below 200 percent of the poverty level. Analysis from the 2001 MTC study identified communities that have high shares of low-income residents. The City was identified as a low-income community having 37.2 percent of residents at or below 200 percent of the poverty level¹ (MTC 2001).

4.13.2 Regulatory Setting

Federal

On February 11, 1994, President Clinton issued an "Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" designed to focus attention on environmental and human health conditions in areas of high minority populations and low-income communities, and promote non-discrimination in programs and projects substantially affecting human health and the environment (White House 1994). The order requires the U.S. Environmental Protection Agency (EPA) and all other federal agencies (as well as state agencies receiving federal funds) to develop strategies to address this issue. The agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and/or low-income populations.

In 1997, the U.S. EPA's Office of Environmental Justice released the *Environmental Justice Implementation Plan*, supplementing the EPA environmental justice strategy and providing a framework for developing specific plans and guidance for implementing Executive Order 12898. Federal agencies received a framework for the assessment of environmental justice in the EPA's *Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis* in 1998. This approach emphasizes the importance of selecting an analytical process appropriate to the unique circumstances of the potentially affected community.

While many state agencies have utilized the EPA's *Environmental Justice Implementation Plan* as a basis for the development of their own environmental justice strategies and policies, as of yet the majority of California state agencies do not have guidance for incorporation of the environmental justice impact assessment into CEQA analysis. The State Air Resources Board has, for example, examined this issue and has received advice from legal counsel, by a memorandum entitled "CEQA AND ENVIRONMENTAL JUSTICE." This memorandum states, in part, "For the reasons set forth below, we will conclude that CEQA can readily be adapted to the task of analyzing cumulative impacts/environmental justice whenever a public agency (including the Air Resources Board (ARB), the air pollution control districts, and general purpose land use

¹ Analysis based upon 1990 Census data

1 agencies) undertakes or permits a project or activity that may have a significant adverse
2 impact on the physical environment. All public agencies in California are currently
3 obliged to comply with CEQA, and no further legislation would be needed to include an
4 environmental justice analysis in the CEQA documents prepared for the discretionary
5 actions public agencies undertake."
6

7 **State**

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9 Under AB 1553, signed into law in October 2001, the Governor's Office of Planning and
10 Research (OPR) is required to adopt guidelines for addressing environmental justice
11 issues in local agencies' general plans. Currently, the OPR is in the process of
12 updating the General Plan Guidelines to incorporate the requirements of AB 1553.
13

14 **California State Lands Commission Policy**

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16 The CSLC has developed and adopted an Environmental Justice Policy to ensure equity
17 and fairness in its own processes and procedures. The CSLC adopted an amended
18 Environmental Justice Policy on October 1, 2002, to ensure that "Environmental Justice is
19 an essential consideration in the Commission's processes, decisions and programs and
20 that all people who live in California have a meaningful way to participate in these
21 activities." The policy stresses equitable treatment of all members of the public and
22 commits to consider environmental justice in its processes, decision-making, and
23 regulatory affairs which is implemented, in part, through identification of, and
24 communication with, relevant populations that could be adversely and disproportionately
25 impacted by CSLC projects or programs, and by ensuring that a range of reasonable
26 alternatives is identified that would minimize or eliminate environmental impacts affecting
27 such populations. This discussion is provided in this document consistent with and in
28 furtherance of the Commission's Environmental Justice Policy. The staff of the CSLC is
29 required to report back to the Commission on how environmental justice is integrated into
30 its programs, processes, and activities (CSLC, 2002).
31

32 **Local**

33

34 Regional and local environmental justice assessments have been performed by
35 agencies within the study area, such as the Bay Area Metropolitan Transportation
36 Commission's (MTC) *2001 Regional Transportation Plan Equity Analysis and*
37 *Environmental Justice Report*. Methods applied in this EIR analysis are consistent with
38 those used in the MTC report.
39

40 This section analyzes the distributional patterns of high-minority and low-income
41 populations on a regional basis and characterizes the distribution of such populations
42 adjacent to the proposed and alternative pipeline corridors. This analysis focuses, in
43 the main, on whether the proposed Project's impacts have the potential to affect area(s)
44 of high-minority population(s) and low-income communities disproportionately and thus
45 create an adverse environmental justice impact.
46

4.13.3 Analysis Criteria

A disproportionate effect on a minority or low-income population would occur if:

- The affected census block group is located within a MTC identified Minority Zone (areas having minority populations of 70 percent or more) or Areas of Poverty (areas having 30 percent of households with 1989 incomes at or below 200 percent of the poverty level) and that group will be subjected to a significant impact (Class I) from other resource disciplines;
- The affected census block group has a minority or Hispanic origin population that is either greater than the Community of Comparison percentage or greater than 50 percent, and that group will be subjected to a significant impact (Class I) from other resource disciplines ;and,
- The affected census block group has a percentage of low-income (below 1999 poverty level) households that is either greater than the Community of Comparison percentage or greater than 50 percent, and that group will be subjected to a significant impact (Class I) from other resource disciplines.

A significant adverse impact from other resource disciplines was also considered to have a disproportionate effect on a minority or low-income population if the impact would clearly affect these populations, even if they do not reside in the affected census block groups. For example, the loss of a Native American cultural site would clearly affect this population disproportionately, even if the members of that Native American group do not reside in proximity to the cultural site. Another example would be the removal of a business or facility serving a minority or low-income community that could not be relocated within an area with similar access and where alternative businesses or facilities are not available to meet the same needs of the minority or low-income population.

4.13.4 Impacts Analysis and Mitigation Measures

Methodology

Significant adverse impacts of the proposed Project and alternatives, as identified in other sections of this DEIR, have the potential to result in significant adverse Environmental Justice impacts if a disproportionate amount of minority or low-income populations may be affected. A two-step process has been conducted to identify potential impacts. First, areas within the study area containing minority or low-income populations that may be disproportionately affected are identified using MTC and Council of Environmental Quality (CEQ) Guidance.

MTC's 2001 Regional Transportation Plan Equity Analysis and Environmental Justice Report identified areas within the MTC planning area that had high minority and low-income populations percentages. According to MTC criteria, areas with high

percentages of minority populations (Minority Zones) were those having minority populations of 70 percent or more, while areas having 30 percent of households with 1989 incomes at or below 200 percent of the poverty level were considered low-income areas (Areas of Poverty). To determine whether the areas surrounding the Long Wharf are located within areas meeting MTC's criteria, Minority Zone and Areas of Poverty maps from MTC's Environmental Justice report were reviewed and compared to study area census block group boundaries.

CEQ's Environmental Justice Guidance under the NEPA, December 10, 1997, states, "Minority populations should be identified where either (a) the minority population of the affected area exceeds 50 percent or (b) the population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of analysis." Using these criteria, demographic data for each study area census block group were compared to demographic data from each appropriate Community of Comparison to determine whether that specific block group had a "meaningfully greater" percentage of minority or low-income population.

Once areas were identified, the second step of the process evaluated all significant, unmitigated adverse effects identified for the proposed Project and alternatives to determine whether project impacts would have a disproportionate environmental impact on a minority and/or low-income population. Impacts for each resource are only generally discussed, and specific information on impacts should be drawn from the appropriate DEIR section.

Long Wharf Impacts to Environmental Justice

Impact EJ-1: Environmental Justice Impacts Associated with Continued Operation of the Long Wharf

The Long Wharf area of potential impact does not include an area identified as an MTC-Minority Zone and Area of Poverty, or an area of Meaningfully Greater Minority or Low-Income Population. However, preclusion of affected populations from fishing areas over an extended period of time could be considered disproportionate, particularly if such populations do not have the ability to go to uncontaminated areas nearby and depend on fishing as a food source.

MTC Minority Zone and Areas of Poverty

The study area does not contain an area identified as having either a minority population of 70 percent or more, or an area with 30 percent of households having incomes at or below 200 percent of the poverty level. Even though the entire city of Richmond has a minority population of 68.6 percent (Table 4.13-1) close to the 70 percent criterion threshold, the threshold is not exceeded. Therefore, the proposed Project's significant adverse impacts identified in other sections of this EIR in or near the study area would not have an effect on an MTC-identified Minority Zone or Area of Poverty.

Areas with Meaningfully Greater Minority or Low-Income Populations

To determine whether the study area census block groups have meaningfully greater minority or low-income populations, minority and low-income percentages in each census block group were compared to those of the Communities of Comparison. As shown in Table 4.13-4 below, census block group 378000, Block Group 12 did not have a meaningfully greater minority or low-income population.

Table 4.13-4
Study Area Minority, Hispanic Origin, and Low-Income Population

	Study Area Census Block 12	City of Richmond
Minority		
Percent	19.4%	68.6%
Exceeds Criteria?	No	
Hispanic Origin		
Percent	9.2%	26.5%
Exceeds Criteria?	No	
Low-Income		
Percent	4.2%	13.4%
Exceeds Criteria?	No	
Source: U.S. Census Bureau 2000		

Based upon the analysis conducted for this EIR, significant adverse impacts resulting from the routine operation of the Long Wharf includes, Operational Safety/Risk of Upset, Water Quality, Biological Resources, and Visual Impacts. Overall, those impacts would effect resources used by the entire local community regardless of whether they minority, Hispanic Origin, or low-income. Therefore, no disproportionate impact would occur. In addition, because the Long Wharf area of potential impact does not include population segments identified as an MTC-Minority Zone and Areas of Poverty, or an area of Meaningfully Greater Minority or Low-Income Population, no impact resulting from the proposed Project would have a disproportionate impact on a minority of low-income population.

The findings in Section 4.4.4.2 Oil Spills in the Estuary or Along the Outer Coast (in Section 4.4 Commercial and Sports Fisheries) indicate that the continued operations of the Long Wharf could result in spill contamination impacts to shrimp, herring, and sport fisheries in central and north San Francisco Bay, San Pablo Bay, Carquinez Strait and elsewhere. Fishing access points, launch ramps and marinas may be threatened or closed. With respect to local sport fisheries, the waters surrounding the Long Wharf harbor sport and charter boat fisheries, including sturgeon, striped bass, halibut, shark, smelt, and perch. The 0.5-mile buffer excludes less than 5 percent of the sport boat fishing area, and no shoreline fishing occurs within 0.5 mile of the Long Wharf. Impacts

to fisheries near the Long Wharf were determined to be less than significant (Class III). Therefore, due to limited sport fishing, impacts to census tract 378000 would not be considered disproportionate.

However, should a spill affect areas beyond the 0.5 mile buffer, the potential exists for fisheries resources and fishing locations used by populations both within and outside of census tract 378000 for subsistence fishing to be adversely affected as described in Impact FSH-9: Fisheries Impacts from Accidental Spills at the Long Wharf or along the Bay Transit Routes. Preclusion of affected populations from fishing areas over an extended period of time could be considered disproportionate, particularly if such populations do not have the ability to go to uncontaminated areas nearby and depend on fishing as a food source.

Mitigation Measures for EJ-1:

EJ-1. Should an oil spill from the Long Wharf extend beyond 0.5 mile from the Terminal and preclude sport fishing for more than two days, Chevron U.S.A., Inc. shall contribute either funds or food stuffs to a local food bank in an amount sufficient, as determined in conjunction with the CSLC, to replace food sources that would have been supplied within the effective areas.

Rationale for mitigation: By contributing funds to a local food bank, Chevron would provide a fair share of mitigation to the affected community.

4.13.5 Impacts of Alternatives

Impact EJ-2: No Project Alternative

Following cessation of operations at the Long Wharf, there would be no potential for tanker spills at the Long Wharf, and no potential for disproportionate effects on a nearby minority or low-income population.

Under the No Project Alternative, Chevron's lease would not be renewed and the existing Long Wharf would be subsequently decommissioned with its components abandoned in place, removed, or a combination thereof. The decommissioning of the Long Wharf would follow an Abandonment and Restoration Plan as described in Section 3.3.1, No Project Alternative.

Under the No Project Alternative, alternative means of crude oil/product transportation would need to be in place prior to decommissioning of the Long Wharf, or the operation of the Chevron Refinery would cease production, at least temporarily. It is more likely, however, that under the No Project Alternative, Chevron would pursue alternative means of traditional crude oil transportation, such as a pipeline transportation, or use of a different marine terminal. Accordingly, this EIR describes and analyzes the potential environmental impacts of these alternatives. For the purposes of this EIR, it has been

1 assumed that the No Project Alternative would result in a decommissioning schedule
2 that would consider implementation of one of the described transportation alternatives.
3 Any future crude oil or product transportation alternative would be the subject of a
4 subsequent application to the CSLC and other agencies having jurisdiction, depending
5 on the proposed alternative.
6

7 With no lease, and after decommissioning, there would be no potential for tanker spills
8 at the Long Wharf. As with the proposed Project, the Long Wharf area of potential
9 impact does not include an area identified as an MTC-Minority Zone and Area of
10 Poverty, or an area of Meaningfully Greater Minority or Low-Income Population;
11 therefore, the No Project Alternative would have no Environmental Justice impact.
12

13 The No Project Alternative assumes the number of tankers servicing the area would
14 remain essentially the same due to regional demands, and assumes that with no Long
15 Wharf, incoming tankers would go to other nearby terminals that may or may not require
16 expansion. Impacts may occur in water quality, biological, and commercial and sport
17 fisheries impacts near the other terminals, and any environmental justice effects would
18 be specifically dependent upon the location of the nearby and the demographics of the
19 communities surrounding each terminal.
20

21 **Impact EJ-3: Full Throughput Via Pipeline Alternative**

22

23 **In order for the Refinery to continue, other marine terminals would be used to**
24 **transfer crude and product by new pipelines in lieu of the Long Wharf. A new**
25 **pipeline may have a disproportionate effect on low-income or minority**
26 **populations.**
27

28 Installation of new/modified pipelines would entail alignments through communities that
29 may have high concentrations of minority, Hispanic Origin, or low-income populations of
30 which the City of Richmond, as identified in Table 4.13-4, has a high percentage.
31 Therefore, depending on the pipeline alignment, significant adverse (Class I and II)
32 impacts associated with this alternative may have a disproportionate effect for both
33 construction, through acquisition of easements, and operations, through potential for
34 pipeline leaks and spills. Such impacts associated with the use of other terminals would
35 depend on the mix of the community near those terminals which would receive an
36 increase in activity.
37

38 Mitigation Measures for EJ-3:

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40 **EJ-3. Implementation of MM BIO-6 and MM GEO-8.**

41

42 Rationale for mitigation: Planning for protection of sensitive resources and providing
43 public information would also help to avoid or provide rapid response to spill events.
44 Even so, spills can impact land based waters, biota, land uses, recreational uses, and
45 fisheries. Provision of proper engineering, inspection, maintenance and retrofitting

would lower the potential for pipeline failure and disproportionate impact to the local community. Also, disproportionate effects of small spills can be reduced with rapid containment and cleanup.

Residual Impact: Residual disproportionate impacts of large spills on low income or minority populations could remain for land based waters, biota, land uses, recreational uses, and fisheries.

Impact EJ-4: Conceptual Consolidation Terminal Alternative

In order for the Refinery to operate, the combination of the Long Wharf with the consolidated terminal would be used, with crude and product transferred by new pipelines to the Long Wharf. A new pipeline may have a disproportionate effect on low-income or minority populations.

As with Impact EJ-3, impacts associated with new/modified pipelines were determined to be significant (Class I and II). These pipelines would entail alignments through communities in the City which have high percentages of populations that may have a disproportionate effect for both construction through acquisition of easements, and operations through potential for pipeline leaks and spills.

Mitigation Measures for EJ-4:

EJ-4. Implementation of MM BIO-6 and MM GEO-8.

Rationale for mitigation: Planning for protection of sensitive resources and providing public information would also help to avoid or provide rapid response to spill events. Even so, spills can impact land based waters, biota, land uses, recreational uses, and fisheries. Provision of proper engineering, inspection, maintenance and retrofitting would lower the potential for pipeline failure and disproportionate impact to the local community. Disproportionate effects of small spills can also be reduced with rapid containment and cleanup.

Residual Impact: Residual disproportionate impacts of large spills on low income or minority populations could remain for land based waters, biota, land uses, recreational uses, and fisheries.

4.13.6 Cumulative Projects Impacts Analysis

Impact CUM-EJ-1: Impacts to Minority or Disadvantaged Communities

Cumulative projects may have the potential to disproportionately impact localized minority or disadvantaged communities. Long Wharf operations do not contribute to this impact.

The cumulative projects are likely located in areas containing some amount of minority or disadvantaged communities. For most of the cumulative projects, impacts on minority or disadvantaged communities are not expected since most of the projects are

water-based. For long-term land-based projects over the 30-year lease period, it is likely that new construction or modification of existing land-based projects could result in temporary or permanent impacts that may result in environmental justice impacts if a business is moved or disrupted or if the new use would create a noise or traffic impact. However, the Long Wharf does not contribute to this impact.

As similar to the proposed Project, the cumulative projects combined can be expected to have cumulative impacts to biota, commercial and sport fisheries, land use, visual resources, due to impacts related to tanker and pipeline spills. Mitigation for cumulative environmental justice impacts must involve evaluation of each project individually and then address their contribution to the cumulative environment.

Table 4.13-5 summarizes Environmental Justice impacts and mitigation measures.

Table 4.13-5
Summary of Environmental Justice Impacts and Mitigation Measures

Impacts	Mitigation Measures
EJ-1: Continued Operation of the Long Wharf	EJ-1: Contribute funds or food stuffs to local food bank.
EJ-2: No Project Alternative	EJ-2: No mitigation required.
EJ-3: Full Throughput Via Pipeline Alternative	EJ-3: Implementation of MM BIO-6 and MM GEO-8.
EJ-4: Conceptual Consolidation Terminal Alternative	EJ-4: Implementation of MM BIO-6 and MM GEO-8.
CUM-EJ-1: Impacts to Minority or Disadvantaged Communities	CUM-EJ-1: No mitigation required.